

In the Claims

1. (Currently Amended) [[A]] An industrial process for recovering an optically active diacyltartaric acid from a salt of an amine and the optically active diacyltartaric acid in an acid aqueous solution, comprising the step that the optically active diacyltartaric acid is added beforehand in the acid aqueous solution and a recycling step wherein about 90% or more of the optically active diacyltartaric acid is recovered.

2. (Previously Presented) The process according to claim 1, wherein the salt of an amine and the optically active diacyltartaric acid is a diastereomer salt obtained by optically resolving a racemic amine using the optically active diacyltartaric acid.

3. (Previously Presented) The process according to claim 1, wherein the temperature of the acid aqueous solution is from 0 to 50°C.

4. (Previously Presented) The process according to claim 1, wherein the optically active diacyltartaric acid is an optically active dibenzoyltartaric acid, optically active ditoluoyltartaric acid, or optically active dimethoxybenzoyltartaric acid.

5. (Previously Presented) The process according to claim 1, wherein the added amount of the optically active diacyltartaric acid is from 0.05 to 3 wt% based on the weight of the acid aqueous solution.

6. (Previously Presented) The process according to claim 1, wherein the acid aqueous solution is an aqueous solution of an inorganic acid.

7. (Currently Amended) [[A]] An industrial process for recovering an optically active diacyltartaric acid, comprising:

an optical resolution step for optically resolving a raw material composition containing comprising a racemic amine and the optically active diacyltartaric acid;

separating the diastereomer salt of one isomer of the optically active amine and the optically active diacyltartaric acid;

a salt dissociation step for dissociating the obtained diastereomer salt into the optically active amine and the optically active diacyltartaric acid using an acid aqueous solution; and

a recycling step to recover about 90% or more of the optically active diacyltartaric acid obtained in the salt dissociation step and recycling the recovered optically active diacyltartaric acid into the optical resolution step as a raw material of the optical resolution step, wherein the optically active diacyltartaric acid is added beforehand in the acid aqueous solution used in the salt dissociation step.

8. (Currently Amended) [[A]] An industrial process for recovering an optically active diacyltartaric acid comprising:

contacting an amine and the optically active diacyltartaric acid and an acid aqueous solution;

precipitating a diastereomer salt of the amine and the optically active diacyltartaric acid;

contacting the diastereomer salt with an acid aqueous solution and the optically active diacyltartaric acid; and

precipitating the optically active diacyltartaric acid; and

recovering about 90% or more of the optically active diacyltartaric acid and recycling same for use in the process.

9. (Previously Presented) The process according to claim 8, wherein the salt of an amine and the optically active diacyltartaric acid is a diastereomer salt obtained by optically resolving a racemic amine using the optically active diacyltartaric acid.

10. (Previously Presented) The process according to claim 8, wherein the temperature of the acid aqueous solution is from 0 to 50°C.

11. (Previously Presented) The process according to claim 8, wherein the optically active diacyltartaric acid is an optically active dibenzoyltartaric acid, optically active ditoluoyltartaric acid, or optically active dimethoxybenzoyltartaric acid.

12. (Previously Presented) The process according to claim 8, wherein the added amount of the optically active diacyltartaric acid is from 0.05 to 3 wt% based on the weight of the acid aqueous solution.

13. (Previously Presented) The process according to claim 8, wherein the acid aqueous solution is an aqueous solution of an inorganic acid.

14. (Currently Amended) [[A]] An industrial process for recovering an optically active diacyltartaric acid comprising:

contacting an amine and the optically active diacyltartaric acid and water;
precipitating a diastereomer salt of the amine and the optically active diacyltartaric acid;

contacting the diastereomer salt of the amine and the optically active diacyltartaric acid with an aqueous acid solution and optically active diacyltartaric acid; and

precipitating the optically active diacyltartaric acid; and
recovering about 90% or more of the optically active diacyltartaric acid and recycling same for use in the process.

15. (Previously Presented) The process according to claim 14, wherein the salt of an amine and the optically active diacyltartaric acid is a diastereomer salt obtained by optically resolving a racemic amine using the optically active diacyltartaric acid.

16. (Previously Presented) The process according to claim 14, wherein the temperature of the acid aqueous solution is from 0 to 50°C.

17. (Previously Presented) The process according to claim 14, wherein the optically active diacyltartaric acid is an optically active dibenzoyltartaric acid, optically active ditoluoyltartaric acid, or optically active dimethoxybenzoyltartaric acid.

18. (Previously Presented) The process according to claim 14, wherein the added amount of the optically active diacyltartaric acid is from 0.05 to 3 wt% based on the weight of the acid aqueous solution.

19. (Previously Presented) The process according to claim 14, wherein the acid aqueous solution is an aqueous solution of an inorganic acid.

20. (Currently Amended)) [[A]] An industrial process for recovering an optically active diacyltartaric acid comprising:

contacting a salt of an amine and the optically active diacyltartaric acid with an acid aqueous solution and the optically active diacyltartaric acid;

precipitating the optically active diacyltartaric acid;
adding further a diastereomer salt of the amino acid and the optically active diacyltartaric acid; and

precipitating the optically active diacyltartaric acid; and
recovering about 90% or more of the optically active diacyltartaric acid and recycling
same for use in the process.

21. (Previously Presented) The process according to claim 20, wherein the salt of an amine and the optically active diacyltartaric acid is a diastereomer salt obtained by optically resolving a racemic amine using the optically active diacyltartaric acid.

22. (Previously Presented) The process according to claim 20, wherein the temperature of the acid aqueous solution is from 0 to 50°C.

23. (Previously Presented) The process according to claim 20, wherein the optically active diacyltartaric acid is an optically active dibenzoyltartaric acid, optically active ditoluoyltartaric acid, or optically active dimethoxybenzoyltartaric acid.

24. (Previously Presented) The process according to claim 20, wherein the added amount of the optically active diacyltartaric acid is from 0.05 to 3 wt% based on the weight of the acid aqueous solution.

25. (Previously Presented) The process according to claim 20, wherein the acid aqueous solution is an aqueous solution of an inorganic acid.

26. (New) The process of claim 1, wherein the rate of recovery of the optically active diacyltartaric acid is at least 94%.

27. (New) The process of claim 7, wherein the rate of recovery of the optically active diacyltartaric acid is at least 94%.

28. (New) The process of claim 8, wherein the rate of recovery of the optically active diacyltartaric acid is at least 94%.

29. (New) The process of claim 14, wherein the rate of recovery of the optically active diacyltartaric acid is at least 94%.

30. (New) The process of claim 20, wherein the rate of recovery of the optically active diacyltartaric acid is at least 94%.